An Experimental Investigation of the Mediating Effect of Organizational Learning on Transformational Leadership and Organizational Resilience

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ABSTRACT

Transformational Leadership as an essential component of organizations plays highly supportive role in sustaining organizations' performance during disastrous conditions through development of organizational resilience. The research study investigates the effect of transformational leadership on organizational resilience with an intervening role of organizational learning as mediator. The study being quantitative exploration involves primary data collection from managerial level employees working in NGOs operating in Lahore, Pakistan, using survey questionnaire. The results of the study lead to conclude that transformational leadership has a direct positive effect on development of resilient NGOs, but the indirect effect, involving organizational learning as mediator, is insignificant. Therefore, under crisis contingencies, transformational leaders tend to support individuals and organizations in order to respond and recover from losses, through motivation, inspiration and provision of strong vision rather than promoting learning and enhancing intellectual resources of the organizational members.

Keywords: *Transformational Leadership, Organizational Learning, Organizational Resilience*

INTRODUCTION

Disasters adversely affect organizations when organizations' top management is unskilled for transforming threatening situations into opportunities (Weick & Sutcliffe, 2007). During turbulent political and economic periods, organizations frequently face huge troubles, which if not timely managed pose greatest threats to the survivability and sustainability of organizations (Jüttner, 2005). Natural or man-made disasters have calamitous implications for both organizations as well service receivers. These threats posed as a result of such environmental conditions, seem to have an undefined and unlimited nature of risk and uncertainty (Smith & Fischbacher 2009). However, viewing environmental fluctuation and their impacts on organizations, the organizational system is categorized as high-impact and low probability events (Sheffi, 2005). Robust and resilient organizations are able to effectively manage tremors of economic or political crises as well as natural calamities (Barnett & Pratt, 2000). The importance of transformational leadership in promoting organizational learning is considered as a significant factor in developing resilience of organizations during turbulent environments (Margolis & Stoltz, 2010).

Numerous research studies have been done on organizational resilience based on theoretical framework where organizational resilience have been explored as an adaptive capacity for enabling organizations to adapt to uncertain changes (McManus, Seville, Vargo & Brunsdon,

2008). Gibson and Tarrant, (2010) had discussed the conceptual frameworks comprised of factors important for the management of risks and crises but not quantitatively tested their significance. In this study, a conceptual framework has been developed based on literature studies, highlights factors that affect the resilience of NGOs. Among them the most important factors that lead to the development of organizational resilience include leadership that encourages organizational learning during emergent change or unexpected situations.

Reviewing the previous researches, a rationale for the current situation of disaster preparedness and response interventions by non-governmental organizations in Pakistan can be provided. According to National Disaster Response Advisor relief organizations are unable to anticipate the occurrence and consequences of a catastrophe and fail to respond and recover from calamity. Following this deficiency, they are not capable to prevent communities and households from being more vulnerable to mishaps. The study realizes the essential call for conducting study on resilience of non-profit organizations that will help to improve their disaster management practices and respond efficiently to any destructive situations. The major purpose of this study is to add up to the scarcity of the quantitative examination and provide greater understanding of the effect of leadership on organizational resilience of NGOs working in Pakistan. Researchers have not paid attention to studying resilience of non-profit sector. This research study aims to contribute to the limited study on NGOs and fulfill the gap by quantitatively exploring the relationships between the predictor variables and organizational resilience. Moreover, it also aims to determine which important internal organizational factors lead to development of resilient competitive, adaptable NGOs.

The lessons learned as a result of this exploratory, quantitative and empirical analysis of organizational resilience of NGOs can provide knowledgeable contributions for those organizations that lack adaptive capabilities and capacities enabling them to effectively anticipate threat respond to crises and recover from disasters.

LITERATURE REVIEW

Organizational Resilience: A Framework for Organizational Responses and Recovery from Crises

The rate of recurrence with which environmental uncertainties, crises are occurring at global scale lead institutions and systems to rethink how significant it is to build up the resilience of individuals, organizations and communities through achievement of robust systems (Berkes, 2007). The losses and failures faced by stakeholders either individuals and organizations depend upon the susceptibility that is reduced by having an ability to recover from collapse thereby being resilient (Berkes, 2007). According to Hamel and Valikangas (2003), resilience has become a "quest" for organizations and communities to undergo big change without going in to crisis. It has become necessary to rethink the management principles that help organizations develop their abilities to manage crisis situations (Hamel & Valikangas, 2003). Systems, organizations and individuals need to develop ways to predict and mitigate volatilities and build up abilities to manage new critical circumstances (Berkes, 2007).

Although the process of organizational adaptation deals with the planned change having prior anticipation for responding to any environmental change inducements, but the notion of resilience involves a systems approach and a dynamic outlook (Nelson, Adger & Brown, 2007). It is being used to explore how individuals, organizations and systems as a whole react to and recover from abrupt changes using model for resilience (Carpenter, Walker, Anderies,

& Abel, 2001). Resilient organization exhibit adaptive characteristics that enable them to thrive in extreme conditions and maintain their abilities for accomplishing goals while achieving corporate sustainability and survival (Benn Dunphy & Griffiths, 2014). Several conceptual frameworks have been developed to study organizational resilience but there is need to investigate how organizations manage crisis, go beyond dealing effectively with calamities, and which variables of management principles help them to build resilience (Burnard & Bhamra, 2011; Kantur & İşeri-Say, 2012).

International health care industry presents miserable situations and lacks resilience due to poor roles of leaders in creating innovative and change adaptive organizational culture (Lofquist, 2016). Top management must transform them into transformational and resilient leadership so that they become able to effectively understand the dynamics of external environment (Lofquist, 2016). According to (Herman & Renz, 2008; Sowa, Selden, & Sandfort, 2004) the non-profit organization's ability to sustain and gain stability and effectiveness arise from the interaction between organization's systems and activities and its environment. NGOs need to evaluate whether they have the essential characteristics to demonstrate resilience in difficult situations. Several research studies regarding resilience have been conducted on private and for-profit organizations, a very few or no researches are based on non-governmental organizations.

Theoretical Support

The research aims to investigate how internal organizational factors enable organizations to cope with impact of crises and develop organizational resilience to ensure continuity of operations (Wildavsky, 1988; Somers, 2009). One of the important aspects of developing resilience is ability of organizations to operate adaptively and develop a collective sense of an uncertain situation (Maitlis & Sonenshein, 2010). This study and the conceptual model is theoretically supported and inspired by Sense Making Theory (Weick, 1988). However, the concept of organizational resilience forms its basis with High Reliability Organizations theory (Samba & Vera, 2013; Weick & Sutcliffe, 2007).

Zhang, Jia, & Lihong, (2012), studied role of transformational leadership under crisis situations from the perspective of sense-making theory, as transformational leaders enthusiastically seek ways to modify followers' behaviors that enable them to work for the collective interests of organizations and their goals. From the standpoint of sense-making theory, self-sacrificial behaviors of leaders make followers to accomplish organizational goal in crisis situations (Zhang et al, 2012). Weick (1988) reinforced the concept of effective organizational change during disasters, by explaining the characteristics of sense-making through creating linkage among leadership, learning and organizational change. Leadership play an important role in enhancing organizational learning in uncertain conditions and in the light of sense making theory, leaders enhance followers' body of knowledge by promoting communication and participation in order to manage changes (Weick, 1995).

Transformational Leadership and Organizational Resilience

The most appropriate leadership style for measuring leadership in crisis is transformational leadership (Avolio, Waldman & Einstein, 1988). During conditions when organization face crises or uncertainties, transformational leaders provide guidance through their ability of sense-making and a compelling strong vision (Hunt, Boal & Dodge, 1999).Organizations' transformational leaders create atmosphere of adaptation by providing a unidirectional vision that generates coherence though out organizational structure, processes and employees for

adapting to major changes in external environment (Shiva & Suar, 2012). Visions and missions are translated into practical application by adaptive leaders to create flexible organizational culture to respond to, recover and survive in extreme situations (Schneider, Ehrhart, Mayer, Saltz, & Niles-Jolly, 2005). The field of organizational resilience especially in context of NGOs, is regarded as most critical area of analyzing which factors affect the resilience of both public as well as non-profit sectors and improve their capability to respond to disastrous situations (Norris, Stevens, Pfefferbaum, Wyche & Pfefferbaum, 2008; Sherrieb, Norris, & Galea, 2010; Jung & Song, 2014). Transformational leaders inspire followers, especially new employees to get oriented to the new flexible NGOs' culture which emphasizes on their development in team work, problem solving, collaborative strategy formulation and decision making (Xenikou & Simosi, 2006). Leaders and top management can avoid unresponsiveness of their subordinates by having sound understanding of staff challenges in uncertain situations, external environment and process of effective change management (Austin, 2013).

Waugh and Strieb (2006), suggested that employees in the top management authority or leadership positions should exhibit supportive and collaborative behaviors for managing emergencies. Leaders are also responsible for managing threats and existing calamities that have potential to seriously harm organizations (Sjöberg, Wallenius, & Larsson, 2006; Van Wart & Kapucu, 2011). Valero, Jung & Andrew (2015), conducted a study that is based on analyzing the effects of transformational leadership on organizational resilience.

The democratic form of leadership that own characteristics such has flexibility, adaptability and coordination, serves as best prerequisite for building a resilient organization (Zehir & Narcıkara, 2016). The concept of transformational leadership is theorized as behaviors of leaders by which they inspire and motivate subordinates to adapt to and bring about changes in their behaviors to cope with the uncertain environment (Northouse, 2015). Transformational leaders are effective in continuously improving subordinates' satisfaction who exhibit positive performance through encouragement and support for open organizational culture (Trottier, Van Wart & Wang, 2008; Gooty, Gavin, Johnson, Frazier & Snow, 2009; Kim, 2012). The positive association between the two variables is consistent with the findings of the studies performed by Kapucu and Khosa (2013) who also suggested significant role of transformational leadership, in effectively managing emergencies in both public and non-profit organizations. The sustainability and flexibility come into existence through shared leadership and have a positive relationship with organizational survival during the occurrence of a hazard (Mehra, Smith, Dixon, & Robertson, 2006). Shared leadership plays an important role in raising the level of members' commitment and contributing maximum effort towards organizational success even in times of misfortunes (Carson, Tesluk & Marrone, 2007). Witmer and Mellinger (2016) found out that non-profit organizations, that lack resilience and are unresponsive to unplanned changes, can alter threats into opportunities by incorporating transformational leadership that helps all members to develop change adaptive capability. Transformational leadership enables organizational people to consistently provide uninterrupted services in times of crisis. According to Kovoor-Misra, Zammuto & Mitroff, (2000), technology intensive organizations tend to prepare for disasters in terms of technical systems and processes and less focus on non-technical areas.

The two major approaches that non-profit organizations' management value while performing their operations and managing change, include resource dependence and institutional theory (Miller-Millesen, 2003). The first approach is the theory of resource dependence referring as the capability to gain and sustain organization's essential resources in order to ensure its survival in emergency situations (Pfeffer & Salancik, 1978). The second approach is institutional theory that considers the ways through an organization's structures, processes and

systems exhibit institutional norms, rules pressures and limitations (Meyer & Rowan, 1977). According to Kovoor-Misra et al., (2000), a leader is a bellwether in phase of crisis management not for the organization but also for overall industry (whether technological or not), thereby serving as a role model to guide other during crucial conditions.

CEOs or leader must acknowledge weaknesses and threats through their experiences for effectively managing crisis and strive to seek ways to maintain appropriate performance levels during a trouble (Bradshaw, Murray, & Wolpin, 1992). Green and Grieinger, (1996) suggested that organizational effectiveness and adaptability particularly in critical conditions is due to boards' commitment to their responsibilities as they plan for long-term regarding financial and resource controls, dispute resolution and gaining sustainable competitive advantage. Non-governmental organizations that have influential and powerful leaders have the potential to improve their organizational value and strength in long-term (Provan, 1980). Leaders tend to develop behaviors that are demanded by certain environmental conditions and organizations' life cycles in order to become adaptive to recover from any disruptions (Dart, Bradshaw, Murray & Wolpin, 1996). In critical conditions, leaders play role of boundary spanners that view organizations operating in open environments, by developing "mutual relationships" with external organizations; enhancing organizational adaptation (Dess & Beard, 1984); disseminating most critical information to all members and representing organizations towards external stakeholders (Dess & Beard, 1984).

The approach of institutional theory provide board members with awareness of external environment so that leaders expand their membership for effective responsiveness to external demands and create innovative ideas to achieve benefits of transformations (Abzug, 1996; Luoma & Goodstein, 1999). The major support is provided by leaders when they communicate shared values that create alignment, harmony and coherence among the followers and thus create organizational value (Porter & Kramer, 2011). From literature review it can be deduced that transformational form of leadership has a significant positive effect on organizational resilience.

Hypothesis 1: Transformational leadership helps to adapt and manage environmental uncertainties to enhance organizational resilience

Intervening Effect of Organizational Learning on the Relationship between Transformational Leadership and Organizational Resilience

By promoting learning leaders not only improve the adaptability but also increase the overall resilience of the organizations (Lussier & Achua, 2015). Manshadi, Ebrahimi & Abdi, (2014) also highlighted the importance of transformational leaders in making simple organization a leaning organization that is more capable of encountering environmental crises. Studies have highlighted a significant role of transformational leadership that emerges during environmental turbulences to create a fit between organization's internal and external environment (Waldman, Ramirez, House & Puranam, 2001). Effective leaders encourage organizational learning by gaining experiences from failures, sharing critical information among organizational members and display behaviors that promotes openness to unusual situations (Schneider et al., 2005). Any organization's culture embraces learning due to the effective role of transformational leadership. Leaders provide support to employees and serve as anchor in bringing the system out of a crisis. They promote communication, empathy and backing thereby, enabling followers to suppress their anxieties in times of change develop creative ideas to manage new situations opportunistically (Jyoti & Dev, 2015). Organizational learning fostered through inspirational leadership contribute a lot towards developing organizational resilience, growth and effective performance during hard times (Sutcliffe & Vogus, 2003). Raguž and Zekan

(2015), explored the significance of transformational leadership helping organizations to create preferred adaptive workplace through promoting learning oriented organizational climate that values change. The success of organization's change adaptation lies in learning outcomes such as open communication, consistent learning, team work, system powered with empowerment and visionary leadership (Raguž & Zekan, 2015). Organizational learning develops with time when leaders develop trust within and between organizational members so that not only depend upon leaders due to trust on them but also develop confidence on their abilities or skills to be used effectively and involve themselves in bring innovations to existing processes while bearing maximum risks (McGill & Slocum, 1993).

Leadership is associated with resilience at individual as well as organizational level while learning has an intervening role in overcoming the effects of threats and challenges. There is lack of empirical investigation of the relationship between leadership, learning and resilience (Harland, Harrison, Jones & Reiter-Palmon, 2005). Organizational learning enables employees to enhance their proficiency in two categories of skills (Garvin, Edmondson & Gino, 2008). The first category involves, becoming skilled at acquiring and understanding, information critical to respond to uncertainties, whereas, the second involves becoming capable of modifying behaviors to adapt to new situations (Garvin et al, 2008). One of the best approaches to enhance organizational learning is to create an open learning organizational culture for which leadership plays a significant contribution (Argyris, 1996; Senge, 2003).

Previous studies on crisis and disaster management greatly emphasize the significance of learning to proactively prepare for future crisis (Carroll 1998; Smith & Elliot 2007). Through learning, organizations develop in terms of creative, emotional, technical, integrative, aesthetic, spiritual and cultural aspects (Mitroff, 2005). Learning in disastrous conditions is considered as persistent phase of organizational recovery that enables organizations to improve their ability to diagnose a crisis (Gonzalez-Herrero & Pratt, 1995). Development of a strategy that is focused on promoting enduring leadership support and creating a learning oriented culture encourages learning at all organizational levels, supports the purpose of increasing learning within the organization (Britton, 2005). For overcoming challenges organizations are required to undertake revisions, strong values and information or knowledge management systems that help organizations to adapt to uncertainties (Siebenhüner & Arnold, 2007). Learning is the key factor that determines organizational performance and effectiveness in long-term and therefore, is used to integrate individuals' different perceptions of organizational outcomes leading to accomplish a specific goal (Probst & Büchel, 1997).

For non-profit firms to sustain in critical conditions, the strategic thinking and action of transformational leaders are most important to enable change adaptation. NGOs are reflection of the social system, therefore, their strength represents the power of the communities (Branche, 2014). One of the studies performed by Carmeli and Sheaffer (2008), found out that learning leadership has direct positive effect on organizational learning from failures that has positive effect on organizational adaptation, an important component of organizational resilience. Transformational leaders institutionalize learning in organizations by allocating tasks, arranging meetings, building teams, involving individuals in strategy formulation, engage everyone in decision making and problem solving (Tichy & Devanna, 1986). They organize participative system for learning through formation of ad hoc teams and committees to provide solutions to strategic and operational issues that occur due to crisis situations and give feedback to leaders and other units (Argyris & Schön, 2009). Organizational learning emerges as an intervening variable as a result of relationship between leadership and organizational resilience. Based on the literature studies following proposition can be hypothesized:

Hypothesis 2: Transformational leadership enables the organizational members to learn, acquire, share and use knowledge, therefore develops resilience of an organization to combat uncertainties

METHODOLOGY

Sampling

This exploratory and descriptive correlational study is comprised of the determining the relationships between explanatory and response variables. The unit of analysis was managers and employees working in NGOs of Lahore in Pakistan. A total of 106 community development NGOs working in Lahore Pakistan were targeted for study. The organizations' sample size was determined by taking an average percentage proportion of the overall population. The percentage values included 8%, 10%, 11%, 13%, 16%, 18% and 20% (Dwivedi, 2012; Rosander, 1985; Rahman, 2003). The average percentage of 19.08% led to obtain a sample of approximately 20 NGOs through simple random sampling. The population of individual that were accessible during survey were provided with survey instruments, due to unavailability of sampling frame (Trochim, 2005). The data were collected by having three visits in each organization. A sample of 360 randomly selected individual was obtained during data collection phase.

Instrumentation

The questionnaire consisted of two sections i.e. the first section was comprised of questions regarding the demographic data and the second section contained all the instrument scales

Demographic Measures: Managers and employees working in NGOs in Pakistan comprised of individuals working at different levels, performing different role and functions in office or field. It was important to obtain their demographic profile. The demographic items consisted of gender, age, education, nature of job contract and length of service.

Leadership Instrument: Transformational leadership behavior was measured by Multifactor Leadership Questionnaire Short Form (MLQ) developed by Bass and Avolio (1995). The instrument comprised of 4 subscales i.e. idealized influence, inspirational motivation, intellectual stimulation and individualized consideration. The responses were measured on 7-point Likert Scale with anchors of (1) "strongly disagree", (2) "disagree", (3) "slightly disagree", (4) "neither agree nor disagree", (5) "slightly agree", (6) "agree" and (7) "strongly agree".

Organizational Learning: The instrument to measure organizational learning was taken from Calontone et al., (2002) consisting of 9 items and 4 indicators. Organizational learning was used as second order construct whereas, commitment to learning (3-items), shared vision (1-item), open-mindedness (2-items), and intra-organizational knowledge sharing (3-items) are first order learning indicators. These constructs of organizational learning were measured on a 7-point Likert Scale ranging from (1) "strongly disagree", (2) "disagree", (3) "slightly disagree", (4) "neither agree or disagree", (5) "slightly agree", (6) "agree" and (7) "strongly agree".

Organizational Resilience: A 16-items organizational resilience measurement instrument was taken from Mafabi, Munene & Ntayi, (2012) who had theorized resilience of an organization to be assessed in terms of: "organizational adaptation" (5-items), "organizational competitiveness" (6-items) and organizational value (5-items). The responses were measured

on 7-point Likert Scale ranging from (1) "never", (2) "rarely", (3) "occasionally", (4) "sometimes", (5) "frequently", (6) "usually and (7) "every time".

RESULTS AND DISCUSSION

This section consists of outcomes of survey reliability and factor analysis, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), correlation and regression analyses, results of mediation test and results in regard of hypotheses testing through Structural Equation Modeling (SEM). A total of 200 respondents participated in survey. The data collected from survey method was used for performing EFA, CFA and SEM, with no missing value.

Demographic profiles and frequencies

The demographic variables were comprised of different profile characteristics. The results of demographic variables obtained from pilot study revealed that the percentage of male respondents was 83.3% with frequency of 166 whereas, 17% female respondents with a frequency of 34 participated in survey. 4.5% of respondents lied within age group of 26-30 years with frequency of 9, 50% of respondents lied within age group of 31-35 year having frequency of 100 and 45.5% of the respondents were between the ages of 36-40 years exhibiting a frequency of 91. The results of respondents' employment contract showed that 84.5% of the individuals were working on Permanent jobs with frequency 169 and 15.5% of managerial employees were working on contractual basis having a frequency of 31. The outcomes exhibited that 6.5% individuals have 2-5 years of service with frequency 13, 44% individuals had 6-10 years of service experience with frequency 88, 38.5% had 11-15 years of experience with frequency 77, 8.5% of respondents had experience or employment service period of 16-20 years with frequency of 17 and 2.5% individuals had worked for 20-25 years with frequency 5, whereas none of the respondent had length of service beyond 25 years.

Descriptive Statistics of Interval Scale Items

Descriptive statistics exhibited the initial analysis of any dataset. Table 1 displays the descriptive statistics for the continuous variables.

The minimum value of transformational leadership variable was 3 whereas the maximum value was 6. The mean of transformational leadership perceptions of employees was 5.3007 with standard deviation of 0.80165. The value of standard deviation was very less than the mean value of transformational leadership perceptions which reflected that the distribution of responses was slightly skewed.

The minimum value of the organizational learning variable was 2 and the maximum value was 6. The overall mean of the perceptions of managerial level employees about organizational learning in NGOs was 5.3779 with standard deviation was 0.71147. The value of standard deviation was very less than the mean value of organizational learning perceptions which reflected slightly skewed distribution of responses.

The minimum value of the variable organizational resilience was 3 and the maximum value was 6. The overall mean value of organizational resilience perceptions of employees in NGOs was 5.1979 with standard deviation 1.10233. The value of standard deviation was very less than the mean value of organizational resilience perceptions which reflected slight distribution of responses.

Exploratory Factor Analysis (EFA)

Using Promax Rotation method with Kaiser Normalization EFA, the assessment of EFA adequacy results revealed that the KMO value of all items was 0.900, greater than 0.5, indicated good adequacy measure of EFA. The Bartlett Test of Sphericity had a Chi-square value of 10050.906 with a p-value less than 0.05 i.e. p = 0.00, revealed a very good inter-correlation and concluded that the results of exploratory factor analysis were valid. All extraction values were greater than the value 0.3, which led to conclude validity of EFA adequacy. The total variance explained identified five factors while providing the cumulative percentage of 80.481%, explaining the total variance within the data set, exhibiting EFA adequacy. The higher value of Chi-Square i.e. 1495.899 with significance value less than 0.05 had validated the goodness of fit test. The items of survey whose loadings were above 0.5 were identified in first three factors of the pattern matrix table. 15-items of transformational leadership instrument were loaded on factor 2, while 5-items were eliminated due to loading values less than 0.5. 7-items of organizational learning instrument were loaded on factor 3, having loading values above 0.5 while, 3-items with loadings less than 0.5 were eliminated. 12-items of organizational resilience instrument were loaded on one factor 1 having loadings greater than 0.5, while 4 items with loadings less than 0.5 were excluded from the analysis. All the results achieved the convergent validity of exploratory factor analysis.

Reliability and Validity of the items identified after EFA

The first factor of organizational resilience had the Cronbach's Alpha value of 0.983, showed a very high internal consistency of the items. The KMO value was 0.942 i.e. greater than 0.5, indicating good sampling adequacy measure (Hair, 2010). The Chi-square value of 4298.454 with a p-value = 0.00 revealed an acceptable level of inter-correlation among the items of instrument. The factor of transformational leadership had Cronbach's Alpha value of 0.966, showed a very high internal consistency of the items and the KMO value of 0.945 indicated good sampling adequacy measure. The Chi-square value of 3319.568 with p-value = 0.00, showed a very good inter-correlation among the items. The organizational learning factor had Cronbach's Alpha value of 0.919 demonstrating high internal consistency of the items. The KMO value was 0.880, exhibits good adequacy measure. The Chi-square value of 1037.123 with significant p-value = 0.00 and revealed a very good inter-correlation among the items of instrument.

Measurement Model through (CFA)

The measurement model specifies the hypothesized relationships of observed variables with the latent variables obtained through confirmatory factor analysis (CFA).

Model Fit and Modification

One of the absolute fit measures is CMIN/DF (Chi-Squared/ degrees of freedom) with cut-off level ≤ 3 (Yatim, 2008; Gaskin, 2013e). The results of CFA exhibited a CMIN/DF value of 5.196 which did not fulfill the criteria. RMR (root mean square) has cut-off level ≤ 0.05 (Tabachnick, Fidell & Osterlind, 2001), whereas, the RMR for the underlying model was greater than 0.05 i.e. 0.084 not adhered to the criteria for absolute measure fit, therefore, had to be reduced. The third absolute fit measure is GFI (goodness-of-fit index) having cut-off level ≥ 0.9 (Tabachnick et al, 2001). The GFI of the model fit obtained as a result of performing CFA in AMOS was 0.336 which was far less than 0.9, therefore had to be increased. The model modification was done to meet cut-off levels by eliminating observed variable with the least regression load till the values of the absolute fit measures met their acceptable cut-off level. The model fit measures obtained as a result of model modification,

the results of CFA exhibited a CMIN/DF value of 2.648, RMR value of 0.045 and value of GFI 0.944. All the three absolute fit measures lied under the prescribed ranges of their respective cutoff levels.

Correlation among Latent Variables

The correlation values of the relationship between transformational leadership and other latent variables have been interpreted. The positive correlation between transformational leadership and organizational resilience reveals that greater level of organizational resilience in NGOs is related with significance role of transformational leadership in managing external risks. The negative correlation between organizational learning and organizational resilience exhibits that NGOs' ability to bounce back from disasters and emergencies greatly decreases due to poor learning culture. It was observed that the correlation of transformational leadership with organizational learning was positive with value of 0.21; with organizational resilience there was positive correlation exhibiting a value of 0.28 and there existed a negative correlation organizational learning and organizational resilience exhibiting a value of -0.01. Table 1 shows the correlations among latent variables.

Table 1

Correlations among Latent Variables

Variables	Min	Max	Mean	S.D	TL	OL	OR
TL	3	6	5.301	0.802	1		
OL	2	6	5.378	0.711	0.21	1	
OR	3	6	5.198	1.102	0.28	-0.01	1

Correlation is significant at 0.05 level *p < 0.05; TL: Transformational Leadership, OL: Organizational Learning, OR: Organizational Resilience

Regression through Structural Equation Model (SEM)

The results of regression analysis involving beta coefficients, p-values and confidence interval values obtained and the structural model are interpreted below. Table 2 shows the results of regression analysis. Figure 1 shows the regression model and path analysis.

Effect of Transformational Leadership on Organizational Resilience

The outcomes of Regression Model suggested that transformational leadership had positive relationship with organizational resilience (standardized $\beta = 1.043$) with significant p-value = 0.000 i.e. $p < 0.05$. For an increase in the value of transformational leadership by one unit, the organizational resilience increases by 1.043, keeping other factors constant. Since the p-value was less than 0.05 i.e. $p = 0.000$ therefore the results rejected the null hypothesis, and concluded that transformational leadership has a significant effect on organizational resilience of NGOs. The 95% confidence interval (C.I) was 0.935 and 1.146 and did not include zero which indicated that transformational leadership is a significant factor for predicting the resilience of non-profit or community development organizations.

Effect of Transformational Leadership on Organizational Learning

The outcomes suggested that transformational leadership had positive relationship with organizational learning (standardized $\beta = 0.971$) with a significant p-value = 0.000 i.e. $p < 0.05$. For an increase in the value of transformational leadership by one unit, the organizational learning increases by 0.971, keeping other factors constant. Since the p-value was less than 0.05 therefore it was concluded that transformational leadership had a significant effect on organizational learning. The 95% confidence interval (C.I) was 0.808 and 1.134 with no zero which indicated that transformational leadership is a significant factor for predicting the learning workplace climate of non-profit or community development organizations. Transformational leadership enables non-governmental organizations to effectively manage crisis situations (Drucker, 1994) and deliver efficient services to communities for development and sustainability (Valero et al, 2015) by providing members a compelling vision, a single direction, empathizing in stressful situations, inspiring organizational members through role modelling and motivating individuals to adapt to new situations quickly.

Effect of Organizational Learning on Organizational Resilience

The regression results shown in Table 2 proposed that organizational learning had negative relationship with organizational resilience (standardized $\beta = -0.086$) with an insignificant p-value of 0.056 i.e. $p > 0.05$. For an increase in the value of organizational learning by one unit, the organizational resilience decreases by 0.086, keeping other factors constant. Since the p-value was greater than 0.05 therefore the results concluded that organizational learning had an insignificant effect on organizational resilience. The 95% confidence interval (C.I was -0.187 and 0.061 including zero indicated that organizational learning is an insignificant factor for predicting the resilience of non-profit or community development organizations.

Effect of Transformational Leadership on Organizational Resilience in the Presence of Mediator Organizational Learning

Mediation Analysis: The notion of mediation involves a condition when the effect of predictor variable on response variable can be appropriately analyzed by incorporating a third intervening variable which is also called, a mediator (Baron & Kenny, 1986). The results given in Table 2 suggested that transformational leadership was found to be significantly predictive of the hypothesized mediating variable organizational learning (standardized a = 0.971) $p = 0.006$ i.e. $p < 0.05$. The analysis of direct effect of transformational leadership (X) on organizational resilience (Y) controlling for organizational learning (M) showed that transformational leadership had a positive relationship with organizational resilience (standardized c' = 1.043) with significant p-value i.e., $p = 0.007$ i.e. < 0.05. When controlling for the transformational leadership (X) variable, organizational learning exhibited negative relationship with the response variable (Y) i.e. organizational resilience (standardized b = -0.086) having an insignificant p-value of $p = 0.102 > 0.05$. The total effect model summary showed that transformational leadership had a positive relationship with organizational resilience (standardized c = 0.959) with significant p-value of $p = 0.003$ i.e. $p < 0.05$. The regression results for indirect effects of the path analysis exhibited that the standardized coefficient "ab" had a negative value of -0.084 with insignificant value of $p = 0.107$. The indirect effect of the path analysis 'ab' had insignificant p-value hence the mediation was proved as statistically significant. The lower limit of bootstrap confidence interval of indirect

effect of transformational leadership on organizational resilience was -0.188 whereas the upper limit was 0.019, including zero which suggested an insignificant mediation effect in the structural model. Hence, the results did not reject the null hypothesis and rejected the alternative hypothesis [H2] thereby, concluding that organizational learning does not mediate the relationship between transformational leadership and organizational resilience of non-profit organizations in Pakistan.

Figure 1
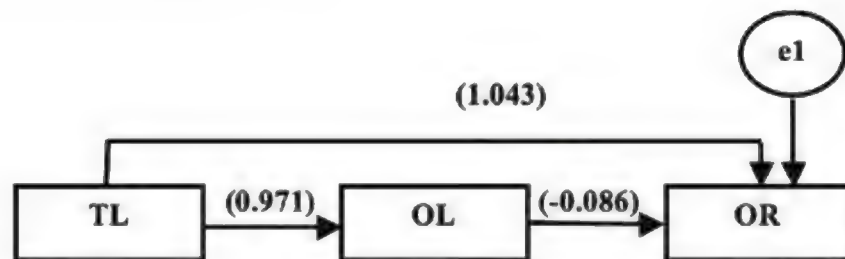
Regression Model and Path Analysis

Table 2

Regression analysis for predictor variables (N=200)

IV	DV	B	P	CI 95%	
				LB	UB
1- TL········▶ OR		1.043	.000	.935	1.146
2- TL········▶ OL		.971	.000	.808	1.134
3- OL········▶ OR		-.086	.056	-.187	.061
Indirect effect (ab)*		-.084	.107	-.188	.019

Note: DV = dependent variable; CI = confidence interval; 95% bootstrap confidence intervals reported; p < .05, ab: indirect path

The results suggest that organizational learning does not emerge with time and does not enhance the impact of transformational leadership on organizational resilience. Non-governmental organizations do not value and embrace learning practices that inhibit them to capitalize on knowledge about the dynamicity of external environment. That is the reason; the outcomes of NGOs in protecting communities of Pakistan are highly deficient.

Model fit for Regression Analysis

The model fit measures for regression analysis were determined by performing SEM in AMOS. The results of regression analysis exhibited a CMIN/DF value of 2.425. The CMIN/DF measurement fit fulfilled the criteria of cut-off level of this absolute measure. The RMR value of model fit measure for the regression model was less than 0.05 i.e. 0.047. The RMR value also adhered to the criteria for absolute measure fit cut-off level. The GFI of the model fit was 0.925 which was greater than 0.9. The value of RMSEA was found to be 0.860 with an insignificant PCLOSE 0.342. All the regression estimate values for model fit conformed to their respective cutoff levels.

DISCUSSION

Resilience is instrumental in ensuring survival of an organization in long-term during occurrence of uncertain situations and to compete in complex environments. There is extreme need to develop resilient organizations permit and enable organizations to become adaptive to changing environments. A resilient organization demonstrates how organizations manage to face crisis situations. Resilience provides strength to the organizations' internal operations and characteristics that protect organizations from external disruptions. Several organizational factors act as determinants that enable organizations to respond to and recover from disasters and sustain operational activities in long-term.

The results have suggested that the direct effect of transformational leadership on organizational resilience is positively significant (β = 0.971; $p < 0.05$, r = 0.28). Transformational leadership enables non-governmental organizations to effectively manage crisis situations and deliver efficient services to communities for development, by providing members a compelling vision, a single direction, empathizing in stressful situations, inspiring organizational members through role modeling and motivating individuals to adapt to new situations quickly. Dartey-Baah (2015) reviewed leadership theories and explored the key traits of leaders that make their followers and overall organizations resilient. These characteristics include emotional intelligence, change adaptation, strategic philosophy, learning and performance orientation (Dartey-Baah, 2015; Sylvester M., 2015). Leaders utilize these traits in times of uncertainty and keep organizations sustainable for longer terms. Sommer, Howell and Hadley (2016) also suggested the relationship of transformational leadership with higher levels of organizational levels in health care industry. The outcomes of the research reveal that transformational leadership supports organizational members to adapt to radical transformations and encourages organizational members to increase commitment towards striving for success and manage organizational resources used to enhance capacity to be used in critical times.

The results obtained by performing regression analysis, have led to conclude that the indirect effect of transformational leadership on organizational resilience in the presence of organizational learning as mediator, is insignificant (ab = -0.084; $p > 0.05$, r = -0.01). However, review of previous studies, provides evidences that organizational learning plays an intervening role when leadership starts to effect on organizational resilience, but results of this study do not comply with the propositions tested and validated by literature studies. The study on NGOs exhibits that the effect of organizational learning on organizational resilience is insignificant i.e. in turbulent or crisis situations, learning does not contribute to development of in order to face adverse situations effectively. During disastrous situations, transformational leadership directly plays an important role in sustaining performance and survival of non-profit organizations, but does not lead to development of organizational learning and

knowledge practices in order to ensure effective response and recovery during emergency situations. Therefore, the organizational learning does not play a mediating role in enhancing impact of transformational leadership on organizational resilience.

CONCLUSION

The study concludes that the notion of organizational resilience has become a "quest" for non-profit organizations to avoid adverse consequences such as reduced funding, increased customer complaints or poor satisfaction and inability to meet set targets of efficient service delivery in a developing country such as Pakistan. NGOs have recognized the importance of rethinking management principles to cope with uncertainties considering the need to sustain in the era of 21st century, therefore, they need to focus on ensuring transformational leadership styles that encourage learning during crises, improving effectiveness of management development programs, delivering ethics training, embedding systems approach, enhancing organizations' social ties within and across sector and ultimately reducing outcomes of political instability. The study concludes that NGOs have to adapt their current practices of organizing robust service mechanisms, sustaining operations under limited funding and bringing them in alignment with external challenges of environmental factors.

It has been found that transformational leadership provides framework for followers to understand circumstances and develop responses for managing uncertainties. Using behaviors and traits, transformational leaders communicate organizational vision and emphasize the importance of having a collective sense of mission among followers to ensure sustainability of NGOs. They develop highly resilient NGOs ($\beta = 1.043$) by establishing norms of openness and adaption to change for accomplishment of goals under crucial conditions such as natural disasters. The study accomplishes that although transformational leaders provide support for developing resilience of non-profits in context of Pakistan, but do not promote organizational learning. In the non-profit sector, leaders fail to organize learning mechanisms and emphasize importance of knowledge sharing in organizations that limit the ability of NGOs to become resilient.

Lessons for Non-Profit Management

This study provides empirical support for the links between transformational leadership, organizational learning and resilience. Apart from the theoretical suggestions regarding direct relationship between transformational leadership and organizational resilience, the results of this study indicate that transformational leadership is strongly related to organizational resilience, whereas the indirect relationship with the intervention of organizational learning does not support earlier findings. Investigating the relationships among transformational leadership, learning, and organizational resilience provided understanding of non-profits' practices in Pakistan. The results have led to accomplish those transformational leadership practices of inspiring through shared vision, encouraging the effort, enabling to act and modeling the method, supporting stability, teamwork and people orientation for change were significantly positively related to development of organizational resilience. However, these leadership characteristics were found insignificant in promoting learning for building resilient NGOs.

RECOMMENDATIONS

NGOs need to embrace the concept of organizational resilience for their effectiveness, sustainability and ultimately effective service delivery for developing vulnerable communities. Communities' survival depends upon the life line and relief services provided by the community development organizations, therefore non-profit organizations need to become strengthened and resilient, thereby, improving their capacity and adaptability to provide adequate and timely service to the affected communities. Organizations must evaluate, renew and update their resilient properties i.e. adaptation, competitiveness and value, so that all organizational components perform effectively to ensure organizations' survival in long-term. Transformational leaders must develop adaptive behaviors and go beyond their self-interests for the good of organizations, thus, they need to play important role in developing highly resilient NGOs. In order to develop resilience of NGOs, leaders must emphasize and enhance learning approaches by communicating organizational activities that facilitate knowledge sharing and obtaining lessons from outcomes of decisions made by senior management. Leaders need to improve learning capabilities of organizational members by encouraging participative decision making and allowing them to communicate new information or problems.

Study Limitations

- The study does not emphasize the impact of organizational size on resilience of NGOs to enhance their resilience against disasters. Further categorization of NGOs may be made on the basis of organizational size, therefore, a comparative study can be conducted by using organizational size as a control variable for determining the significance of organizational size in developing organizational resilience.

- However, the study enables leaders to reflect upon the factors that increase organizational resilience, but a universal definition of organizational resilience has not been provided that tends to measure the concept of resilience. Future researches can be focused on developing approach towards evidence-based assessment technique or tool that measures the extent to which organizations establish resilience during critical times.

- The study outcomes have been obtained from an inadequate sample; therefore, it is suggested to explore the concept of organizational resilience by taking a large sample that provides better explanations for various sizes, different types and various locations of the non-profit organizations.

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